

FIG. 1 Personal Digital Assistant Communication Techniques

100

PRIOR ART

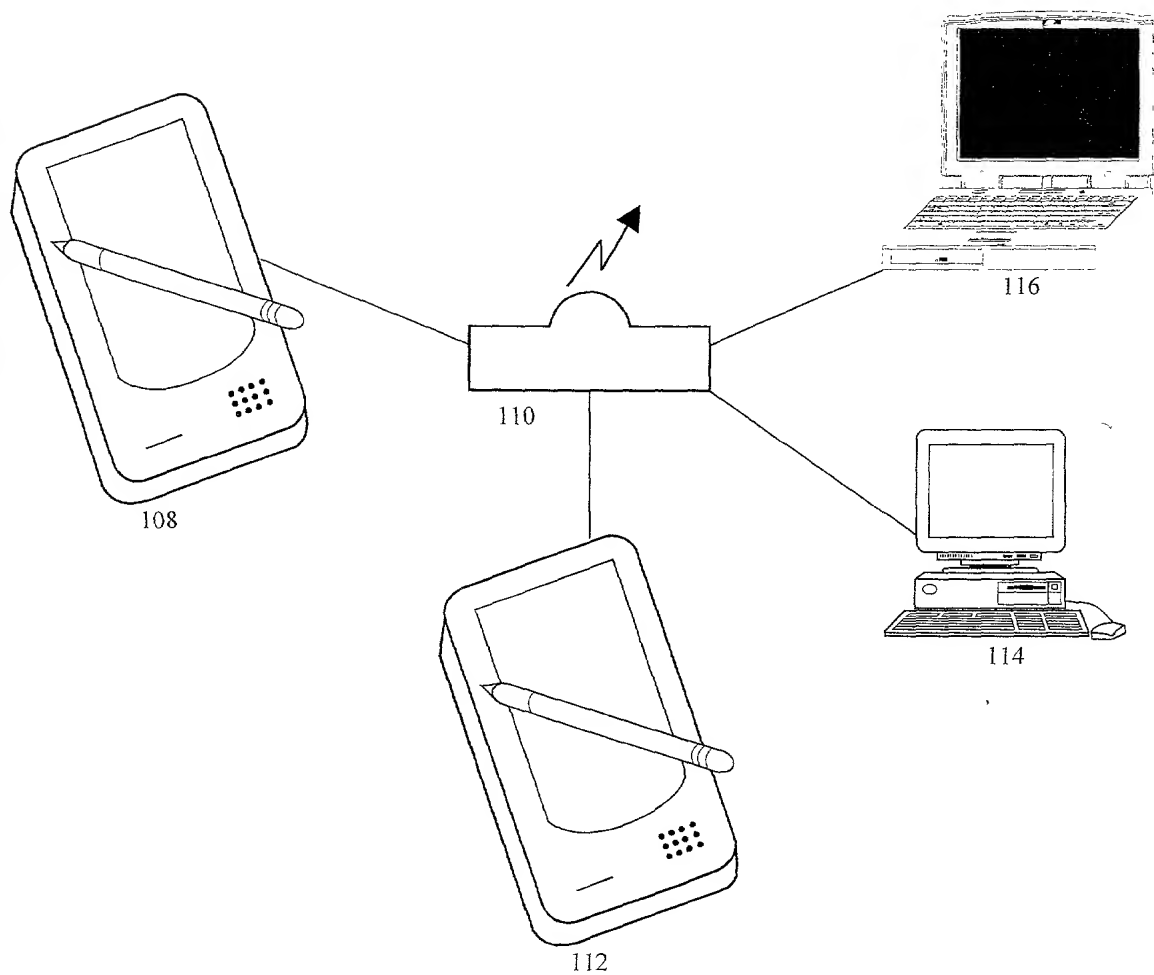
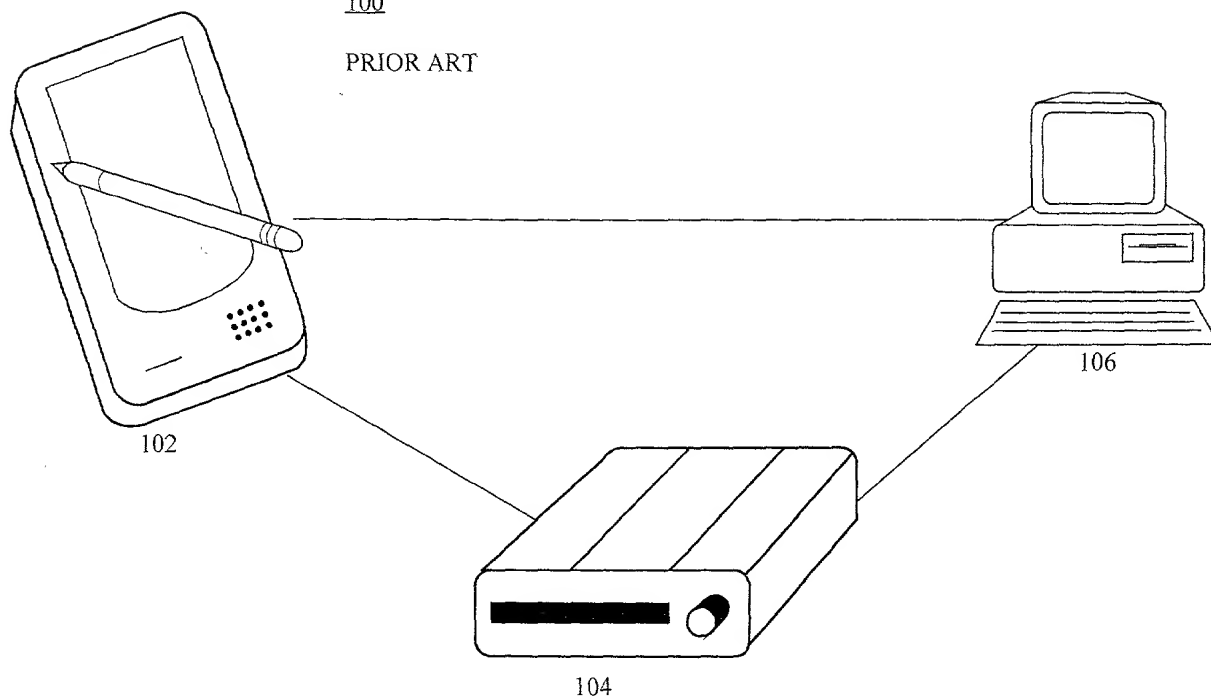


FIG. 100-4263260

FIG. 2 Remote Optical Digital Networking of Computing Devices

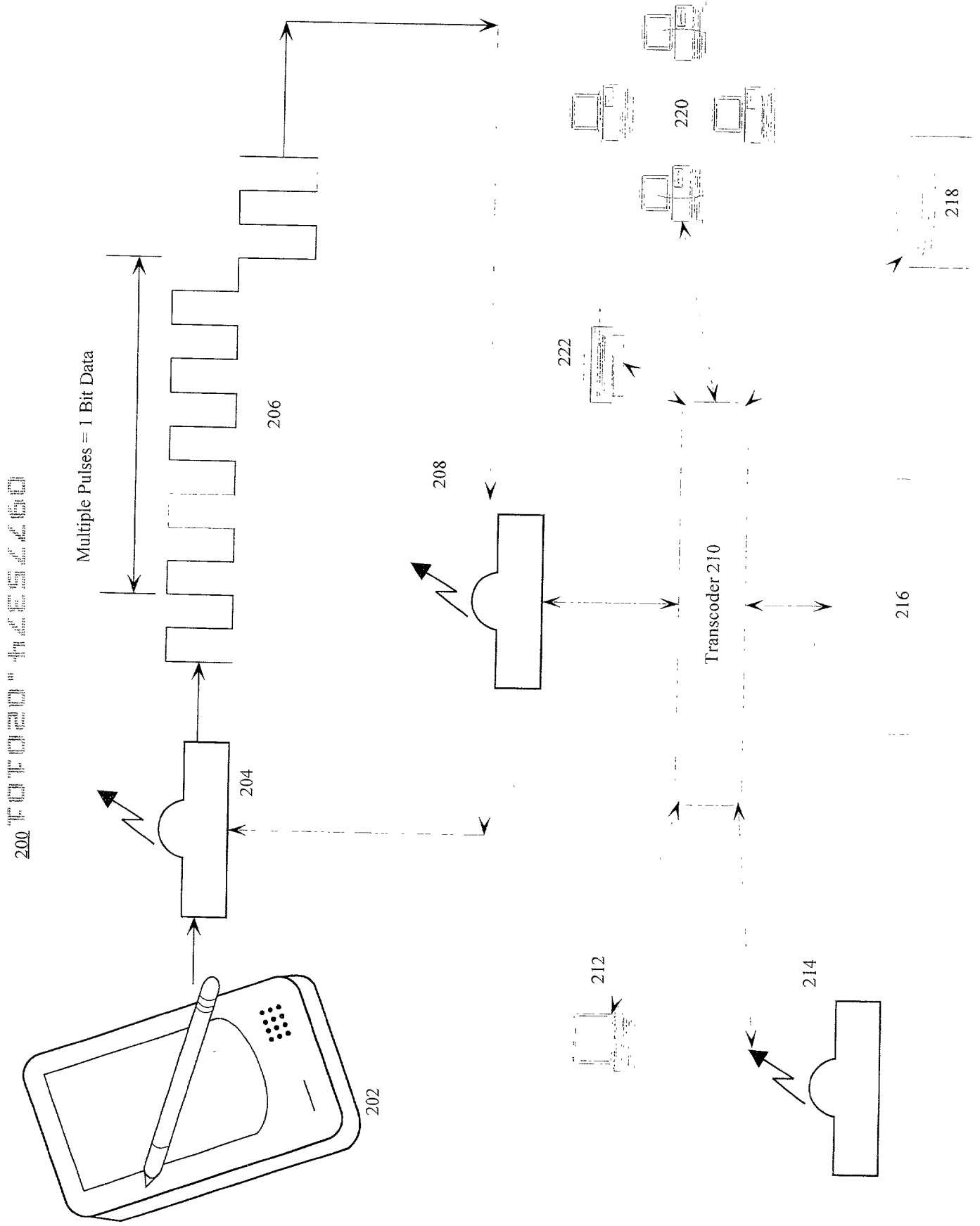


FIG. 3 Remote Optical Digital Networking Showing the Internal Structure of an Access Point

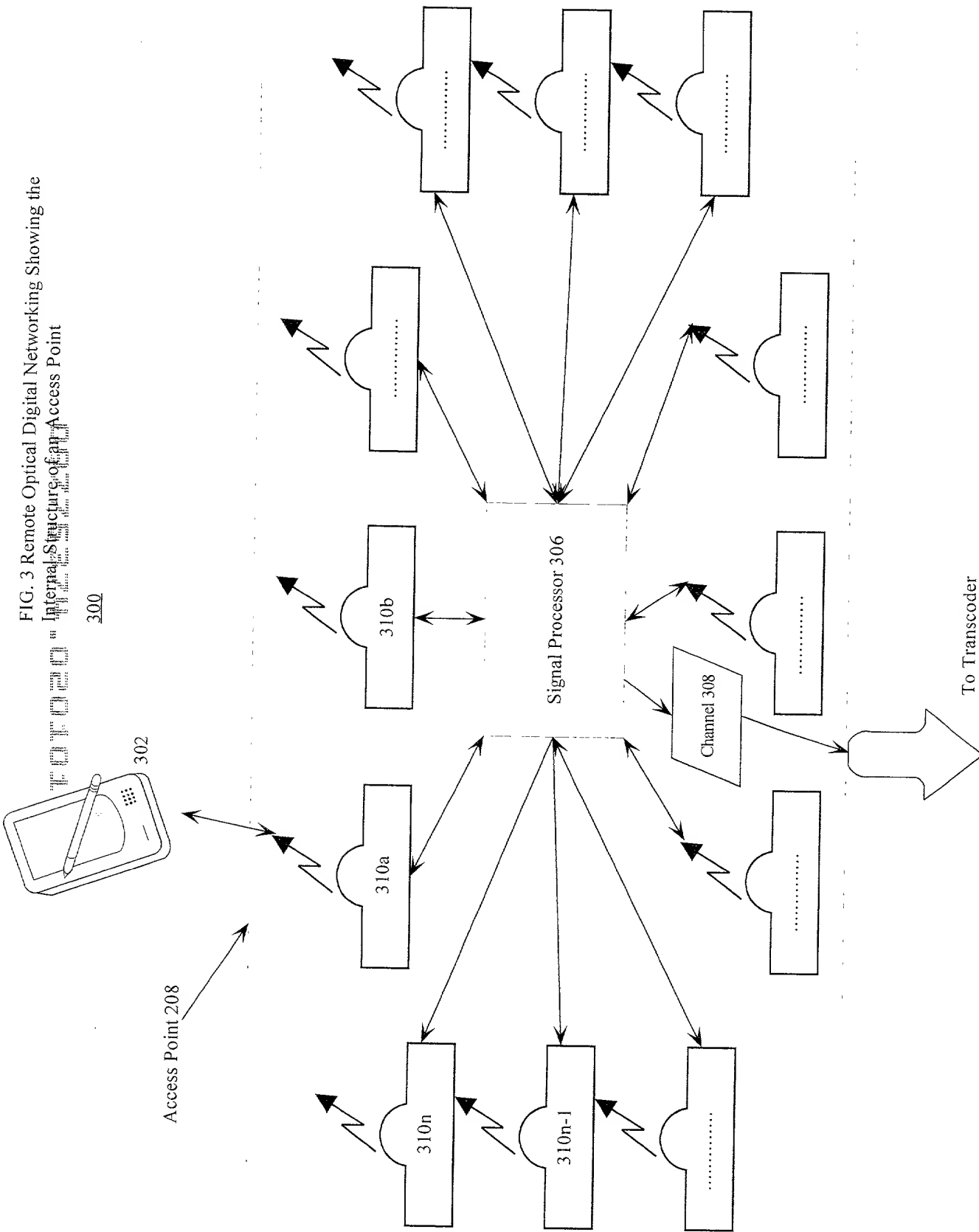
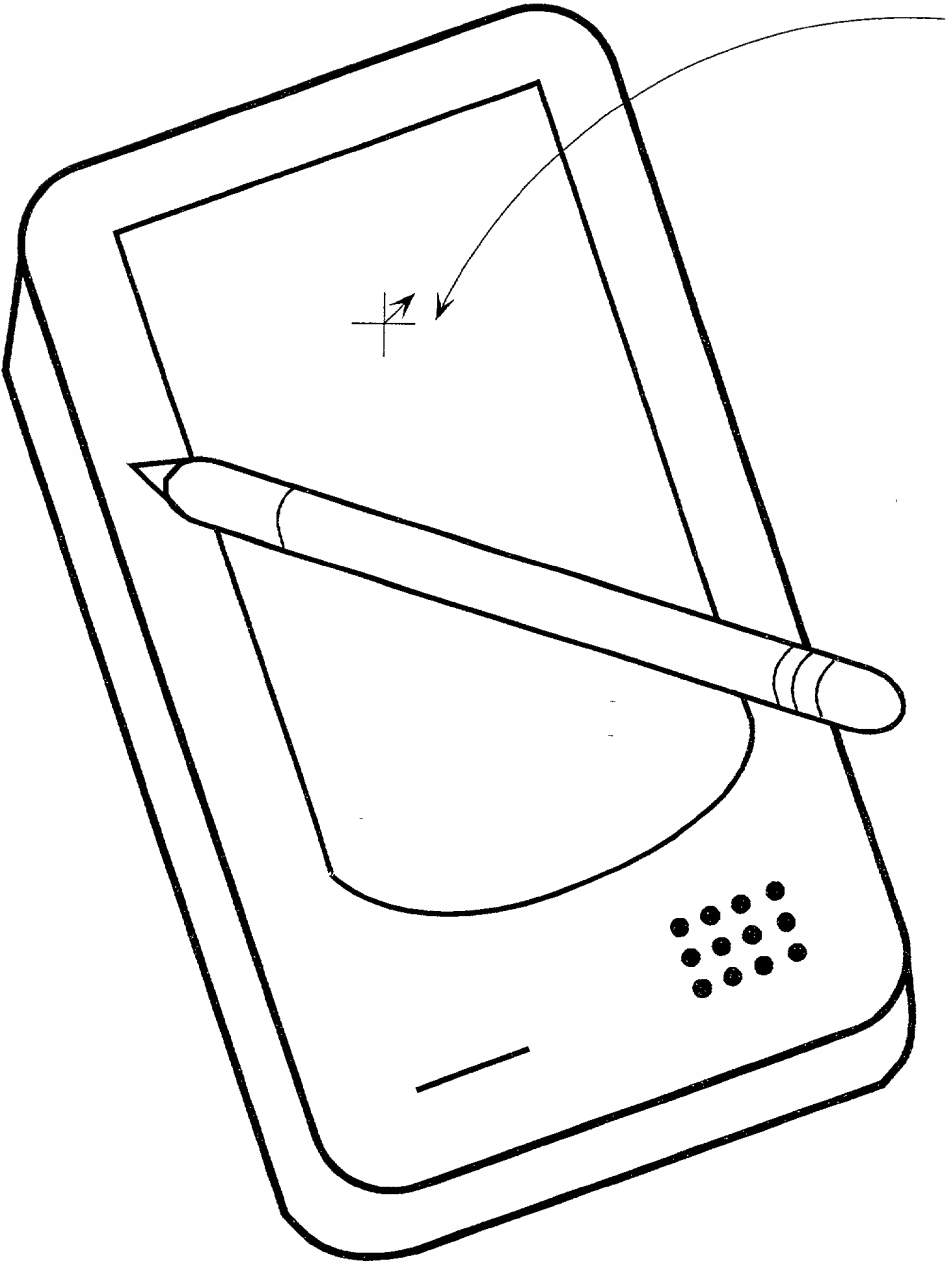


FIG. 4 Personal Digital Assistant with Indication of Signal Strength

400



402

Figure 5 PDA Software

Fig 5A Conventional IR Communication

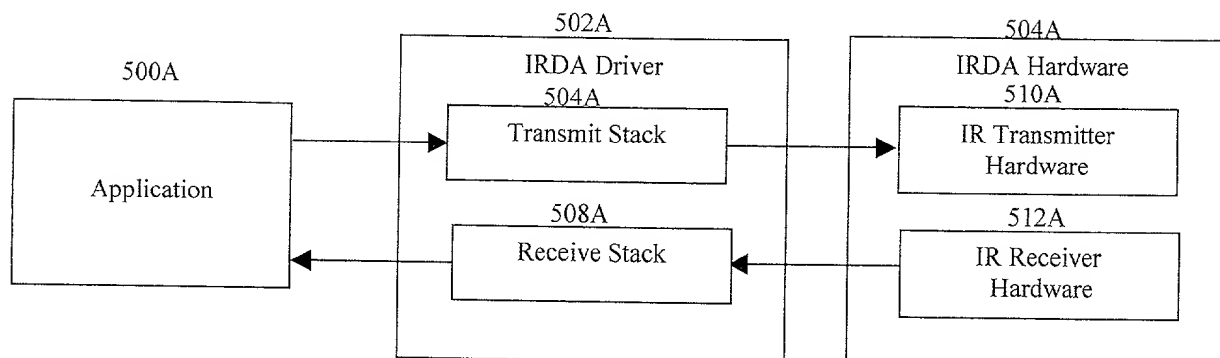


Fig 5B Extended Range Symmetric IR Communication

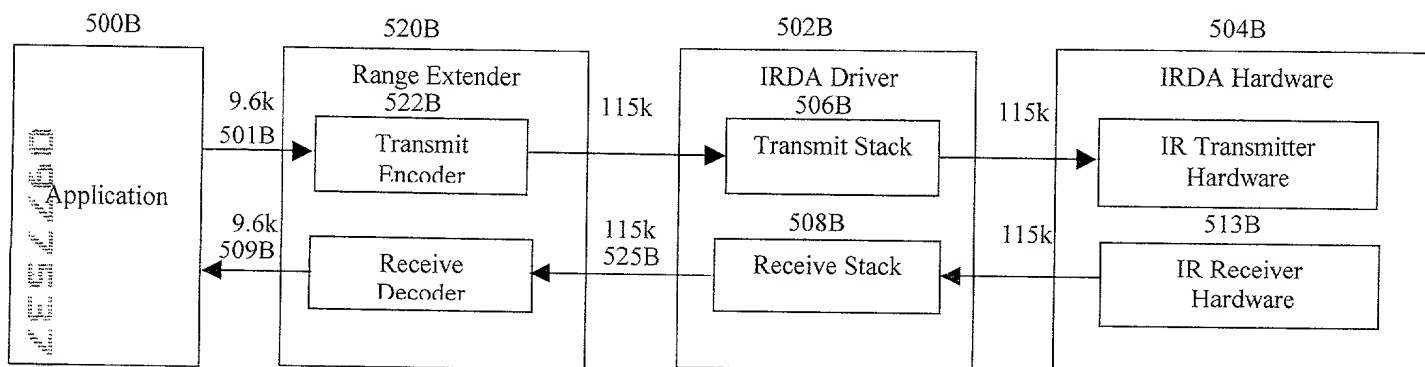


Fig 5C Extended Range Asymmetric IR Communication

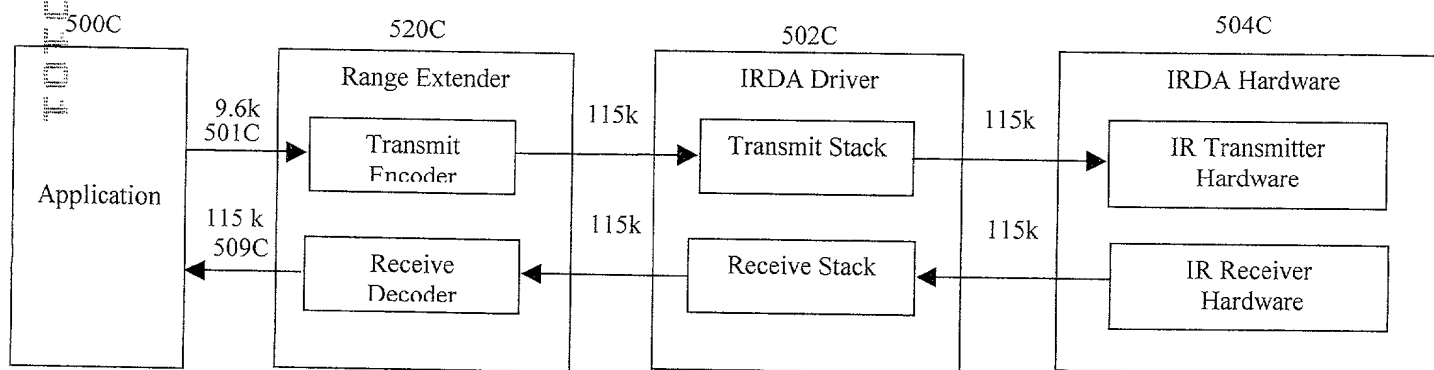


Fig 5D Extended Range Symmetric IR Communication

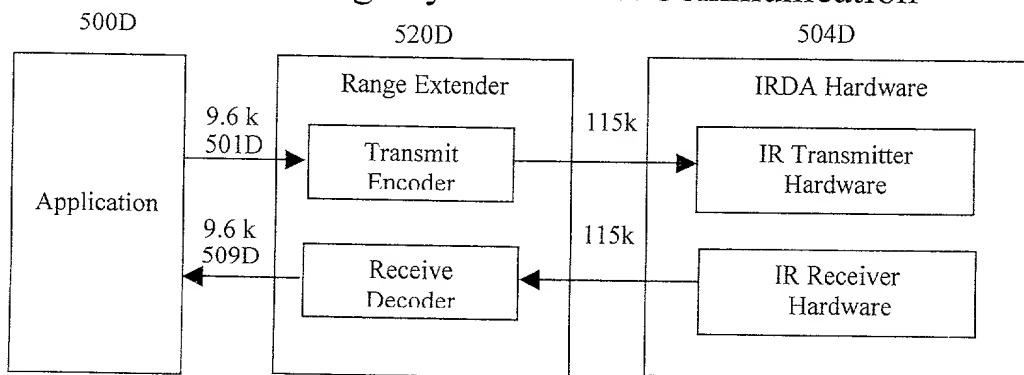


Figure 6 Transmit Encoder

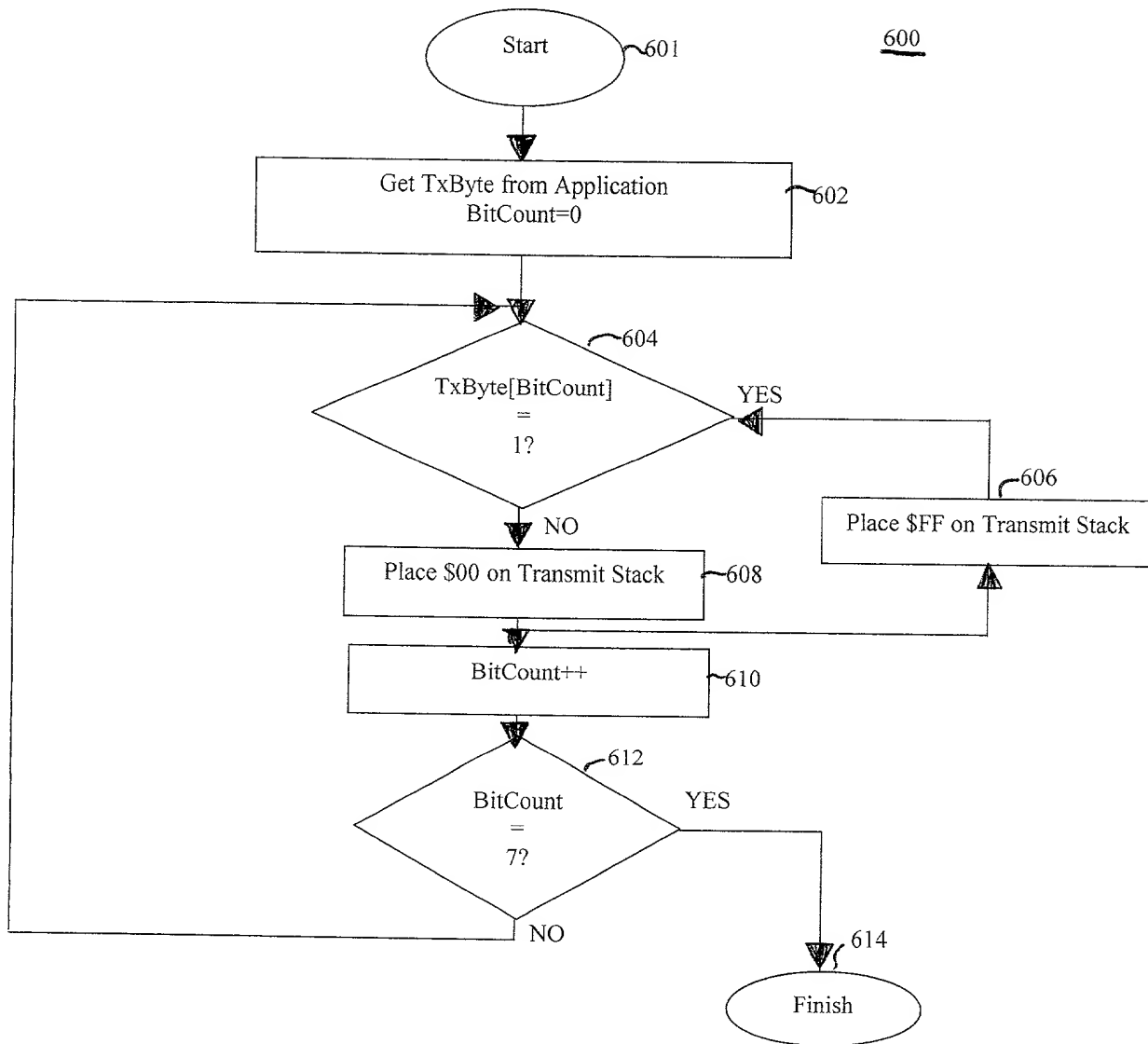


Figure 7 Receive Decoder

700

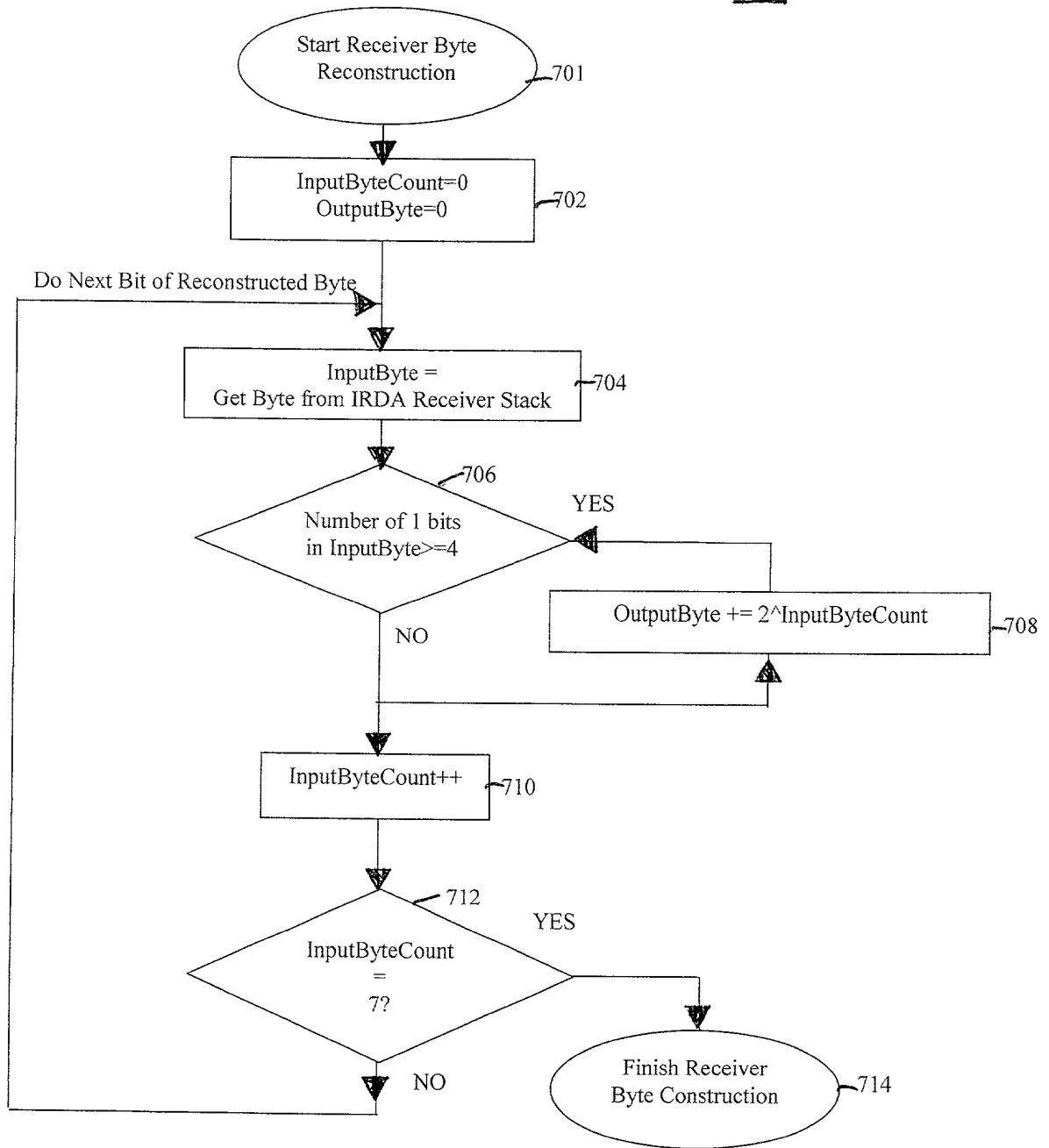
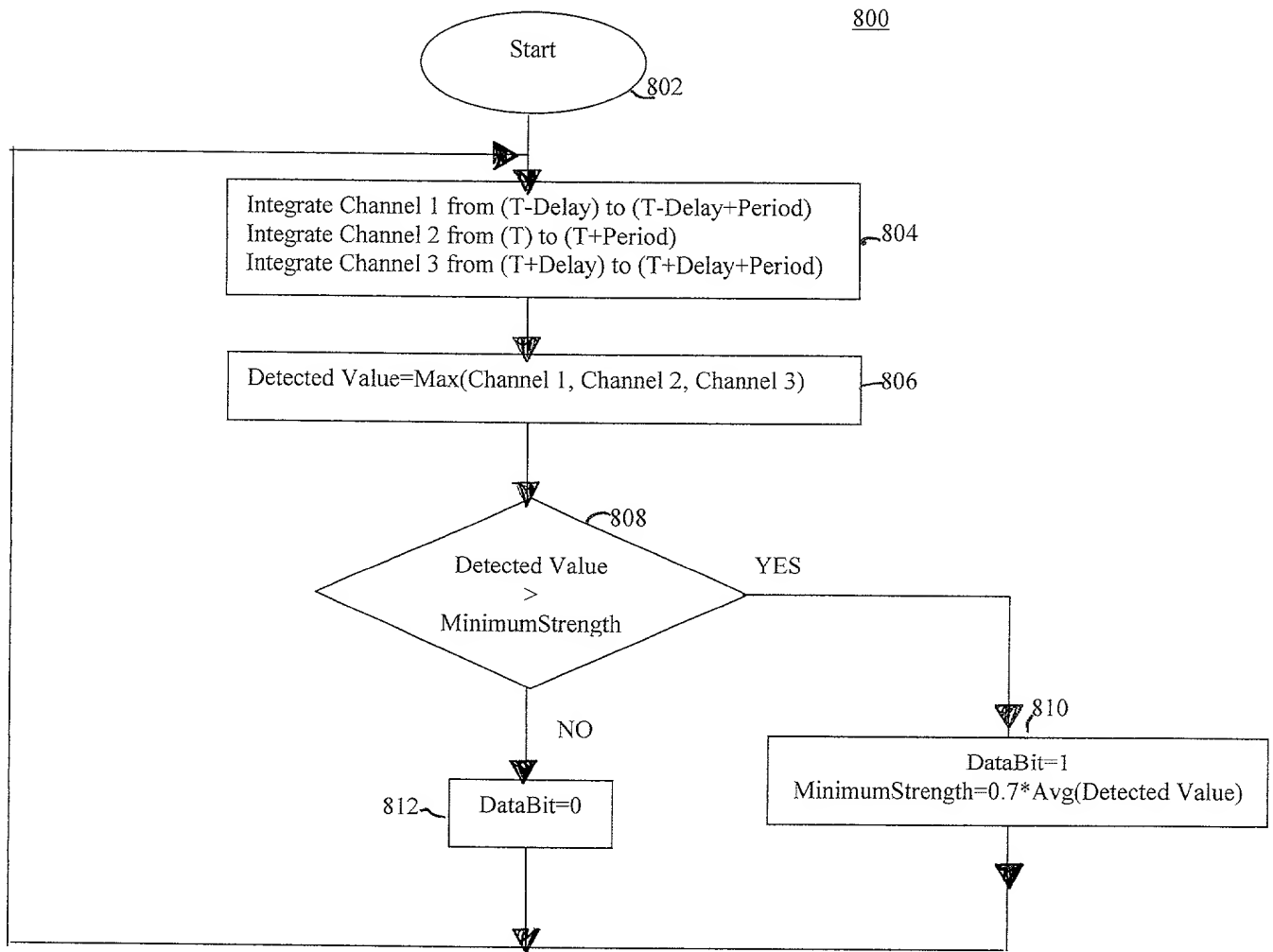


Figure 8

IR Pulse Receiver Synchronization in Base Station



DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

SYSTEM AND METHOD FOR REMOTE OPTICAL DIGITAL NETWORKING OF COMPUTING DEVICES

the specification of which: (check one)

XXX is attached hereto.

_____ was filed on _____
under Attorney's Docket Number _____
as Application Serial No. _____
and was amended on _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 CFR 1.56.

I hereby claim the benefit of foreign priority under 35 USC 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application the priority of which is claimed:

| Prior Foreign Application(s): | Priority Claimed |
|-------------------------------|------------------|
| _____ | ____ Yes ____ No |
| (Number) | |
| _____ | |
| (Country) | |
| _____ | |
| (Filing Date) | |

I hereby claim the benefit of United States priority under 35 USC 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in a listed prior United States application in the manner provided by the first paragraph of 35 USC 112, I acknowledge the duty to disclose information material to the patentability of this application as defined in 37 CFR 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

| | | |
|------------------------|---------------|----------|
| _____ | _____ | _____ |
| (Application Serial #) | (Filing Date) | (Status) |

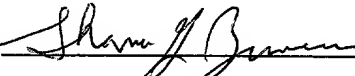
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 USC 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

| | | | |
|---------------------|-----------------|--------------------|-----------------|
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INVENTOR'S SIGNATURE:  DATE: Jan 26, 2001

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CITIZENSHIP: United States

POST OFFICE ADDRESS: Same as above

FOR Filing

ASSIGNMENT

Whereas, we,

- (1)* Thomas G. ZIMMERMAN of Cupertino,
County of Santa Clara and State of California

have invented certain improvements in

SYSTEM AND METHOD FOR REMOTE OPTICAL DIGITAL NETWORKING OF COMPUTING DEVICES

and executed a United States patent application therefor on the following date(s):

- (1)* January 26, 2001

and

Whereas, INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at Armonk, New York 10504, (hereinafter called IBM), desires to acquire the entire right, title and interest in the application and invention, and to any United States and foreign patents to be obtained therefor;

Now therefore, for a valuable consideration, receipt whereof is hereby acknowledged, we, the above named, hereby acknowledge our prior existing obligation and hereby sell, assign, and transfer to IBM, its successors and assigns, the entire right, title and interest in the application and invention therein disclosed for the United States and foreign countries, and all rights of priority resulting from the filing of the United States application, and we request the Commissioner of Patents to issue any Letters Patent granted upon the invention set forth in the application to IBM, its successors and assigns; and we hereby agree that IBM may apply for foreign Letters Patent on the invention and we will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM.

Signed and sealed:

* PLEASE CHECK OR FILL IN ALL SECTIONS WITH AN ASTERISK
DATE SIGNATURE

LOCATION

(county you are in when
signing this document)

(1)* SAN JOSE, CA

Jan 26, 2001

Thomas G. Zimmerman
Thomas G. ZIMMERMAN